

# Appendix I: Acronyms and Terms

(also see *Dictionary of Geological Terms*)

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<b>Achondrite</b>	Stony meteorite, lacking chondules. Igneous origin. Relatively rare.
<b>ANSMET</b>	Antarctic Search for Meteorites, funded by U. S. National Science Foundation; led by William Cassidy and Ralph Harvey.
<b>AMN</b>	Antarctic Meteorite Newsletter (issued by JSC, SN2)
<b>“blue ice”</b>	Locations in Antarctic where samples were recovered (page v)
<b>ALHA</b>	Allan Hills
<b>EETA</b>	Elephant Moraine
<b>LEW</b>	Lewis Cliffs
<b>QUE</b>	Queen Alexander Range
<b>Yamato</b>	Yamato mountains
<b>BM(NH)</b>	British Museum of Natural History, now The Natural History Museum, London.
<b>Cosmogenic Isotopes</b>	Isotopes produced by interaction of high-energy cosmic-rays with elements in sample.
<b>DML</b>	Dark mottled lithology of Zagami meteorite.
<b>DN</b>	Olivine-rich lithology of Zagami, obtained from David New.
<b>druse</b>	A crust or coating of small crystals in a crack or void (see Martinez and Gooding, 1986 for a description of “white-druse”).
<b>Educational Thin Section Set</b>	JSC, BM(NH) and NIPR all have sets of thin sections of meteorites, with educational pamphlets, for use by educational institutions.
<b>exposure age</b>	The time interval a small body (~1m) spends in space as measured by radionuclides generated by high energy cosmic rays.
<b>genealogy diagram</b>	Diagram that shows the relationship of rock splitting and allocations. The number before the comma is called the generic sample and the number after the comma is the “daughter” split.
<b>HED</b>	Howardite, Eucrite, Diogenite. Large group of apparently related achondrites.
<b>Ga</b>	1,000,000,000 years
<b>GPa</b>	Giga Pascals
<b>isochron</b>	A constant-time line on a diagram that compares ratios of radioactive isotopes to their stable daughter isotopes.

<b>interstitial</b>	Area between the other major mineral phases.
<b>JSC</b>	Lyndon B. Johnson Space Center, Houston, Texas 77058
<b>Katabatic wind</b>	The wind that blows off of the Antarctic continent.
<b>herzolite</b>	Two pyroxene rock, plutonic.
<b>Ma</b>	1,000,000 years
<b>Martian meteorite</b>	A meteorite from Mars, a SNC meteorite.
<b>MWG</b>	Meteorite Working Group. U. S. advisory panell to ANSMET.
<b>maskelynitization</b>	Shock event that converts plagioclase into isotropic phase.
<b>mesostasis</b>	Fine-grained mineral mass found interstitial to major minerals.
<b>“mineral” separate</b>	An attempt to obtain a concentration of one mineral phase after powdering the rock and using various mechanical means ( <i>e.g.</i> heavy liquids for density difference).
<b>nakhilites</b>	Nakhla, Lafayette, Governador Valadares
<b>NIPR</b>	National Institute Polar Research, Japan
<b>NZ</b>	Normal, basaltic lithology of Zagami.
<b>“orangette”</b>	New term introduced in this document to distinguish unusual carbonate globules in ALH84001 (see page 98).
<b>ophitic</b>	Texture of basaltic rock where pyroxene completely encloses plagioclase and other phases.
<b>PAHs</b>	Polycyclic aromatic hydrocarbons. Organic compounds made up of benzene rings linked together. Examples given in figure X-18.
<b>pre-terrestrial</b>	The history of the sample before entry into the Earth’s atmosphere - as judged by location with respect to fusion crust.
<b>plateau age</b>	The age obtained from the $^{39}\text{Ar}/^{40}\text{Ar}$ spectrum as function of release temperature.
<b>“pockets” of glass</b>	The small areas of glass found inside the meteorite specimen.
<b>“pods” of glass</b>	The small unusual glass areas in EETA79001. See figure IX-24.
<b>poikilitic</b>	Texture of igneous rock where small granular crystals are irregularly scattered without common orientation in a larger crystal of another mineral.
<b>Radiogenic Isotopes</b>	Naturally-occurring, radioactive isotopes such as K, Rb, U, Th, Sm that decay at a slow rate to another stable isotope and are used for geological age dating.
<b>REE</b>	Rare earth elements.

<b>“rosette”</b>	A symmetrical growth form, resembling a rose, assumed by an accretionary body. Term often used for barite concretions on Earth.
<b>“salts”</b>	Various non-silicate minerals, possibly residual to aqueous solution, found in cracks of Martian meteorites.
<b>schlieren</b>	Texture where glass, or mineral phases are drawn out in stringers.
<b>SNC</b>	Shergotty, Nakhla, Chassigny, a term used in publications before “Martian meteorites.”
<b>SPB</b>	Shergottite Parent Body = Mars
<b>SN2</b>	The mail code for the Planetary Materials Branch at JSC.
<b>shergottites</b>	Shergotty, Zagami, QUE88516, EETA79001
<b>terrestrial age</b>	Time interval that meteorite has spent on Earth.
<b>USNM</b>	United States National Museum, also called the Smithsonian Institution. Washington D.C. Specifically, the Department of Mineral Sciences is a great source of research samples.
<b>Viking</b>	Two highly-successful missions to the surface of Mars in 1976.
<b>“whole-rock”</b>	Term used for a small sample (50 mg-2 g) of a rock used to determine the chemical composition of the “whole” specimen. Generally selected to be representative of the “whole”, but, obviously, NOT the whole rock.
<b>“Yowza-Yowza”</b>	Term used by 1984 ANSMET team to describe something important. New geological term, not found in Dictionary.